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ABSTRACT

This paper examines some of the major problems and barriers faced by Hispanic/Latino youth who, despite high college enrollment rates, do not complete the four-year degree. An examination of five entering classes of Illinois college students found that only 30.2 percent of Hispanic students had completed their degrees at the end of four years, 33.8 percent were still enrolled in college, and 36 percent had dropped out. Factors identified as leading to lack of persistence included the overall cost of earning a degree, lack of academic preparation for college in junior and senior high school, poor articulation between community colleges and four-year institutions, limited access to resources, and family pressures. Several strategies are suggested for improving timely degree completion, including pre-college initiatives such as providing multicultural training for teaching faculty and support staff to dispel stereotypes, introducing concepts of academic achievement and excellence in elementary schools, emphasizing the concept of career opportunities available through post-secondary training, and involving members of the Hispanic community in school parent-teacher organizations. Post-secondary strategies suggested include developing bilingual brochures for high school counselors, parents, and advisors, providing information about fast-track programs, building schedules around student needs, initiating summer scholarship opportunities, and reevaluating general education requirements in colleges. (Contains 28 references.) (JM)

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by Carol P. Timmen, Burton O. Witthuhn, Debi L. Riggins, and Jamie Carson

Working Paper No. 34
November 1997

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Connecting the Parts: A Hispanic/Latino Reality for Achieving More Timely Degree Completion

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Jamie L. Carson served as a Higher Education Cooperation Act (HECA) Grant Associate at Western Illinois University investigating issues of timely degree completion. He received an M.A. and B.A. in Political Science from Western in the specialization of American Politics. His publications include work in *The National Honors Report, the North Central Association's Collection of Papers on Self-Study* and *Institutional Improvement*, and he served as co-author of two monographs focusing on issues of timely degree completion. He has made presentations at the National Academic Advising Associate Annual Meeting, the North Central Association Annual Conference, the Michigan State University Annual Academic Affairs and Administrators Conference, and the Honors Council of the Illinois Region Annual Conference.

Connecting the Parts: A Hispanic/Latino Reality for Achieving More Timely Degree Completion

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The Julian Samora Research Institute is committed to the generation, transmission, and application of knowledge to serve the needs of Latino communities in the Midwest. To this end, it has organized a number of publication initiatives to facilitate the timely dissemination of current research and information relevant to Latinos. The Julian Samora Research Institute Research Report Series (RR) publishes monograph length reports of original empirical research on Latinos in the nation conducted by the Institute's faculty affiliates and research associates, and/or projects funded by grants to the Institute.

Connecting the Parts: A Hispanic/Latino Reality for Achieving More Timely Degree Completion

Introduction

Hispanic perceptions of colleges and educational institutions are often shaped by both flexible and fixed standards of measurement. Affordability of a college education is one such measure that can vary significantly for Hispanic/Latino students. Costs can vary considerably depending on whether students attend a public or private institution, pay in-state or out-of-state tuition, or live within or outside the campus community. Issues of affordability are also raised when one considers the amount of time necessary to complete an undergraduate education.

While many people might believe that four years is a reasonable amount of time to complete a college education, current evidence suggests that fewer students today are finishing their undergraduate degrees in four years than was the case 5, 10, 15, even 25 years ago. According to *The Chronicle of Higher Education 1997-98 Almanac*, of freshman entering colleges in 1989-90, by the spring of 1994, only 25.8% of all students nationally had completed the requirements for a bachelor's degree. A little over 13% were still enrolled in their fifth year and 36.8% left school without attaining a bachelor's degree. Of Hispanics, 17.8% completed BA's within four years, 18.7% were still enrolled year five, and 36.3% left school without obtaining a degree (see Table 1).

Tables 2 and 3 show the percentage of five entering classes of Illinois college students who obtained a bachelor's degree by the year 1994, those who are still enrolled, and those who left school prior to obtaining their BA. The state of Illinois compares favorably with the national time-to-degree figures. However, there is still a disturbing percentage of students who take five and six years to graduate. Slightly over 46% of all freshman entering college in the 1990-91 school year received a bachelor's degree by the Spring of 1994 (see Table 2). While 23.2% were still enrolled a fifth year, fully 30% had left school without obtaining a bachelor's degree. Sadly, when looking at the progress of Latino college students in Illinois, an even greater number leave college before attaining a bachelor's degree, than earn one. In Illinois, 30.2% of Hispanic college students have earned a degree at the end of four years, another third (33.8) are still enrolled for a fifth year, but the greatest percent (36) leave school prior to obtaining a degree (see Table 3).

The percentage of college students who earn a bachelor's degree in a timely manner or otherwise, represents less than 10% of the total Hispanic population, 25 years and older, of the United States (see Chart 3).

Table 1: Bachelor's Degree Awarded After 4 Years, 1989-90 to Spring 1994

Racial/Ethnic Group	*No Degree After 5 Years*	*No Degree Left School*	*Bachelor's Degree*
Black	13.5%	44.7%	16.9%
Hispanic	18.7	36.3	17.8
White	12.3	36.5	27.3
Total	**13.3**	**36.8**	**25.8**

Source: The Chronicle of Higher Education 1997-98, Almanac Issue

Table 2: Attainment, Enrollment, and Non-Persistence Among Illinois 1st-Time Freshmen

Year	*BA's Awarded 1994*	*Still Enrolled 1994-95*	*Left School No Degree*
1986-87	57.9	4.1	39.2
1987-88	57.6	6.0	36.4
1988-89	57.8	7.6	34.6
1989-90	53.5	12.4	34.3
1990-91	46.1	23.2	30.7

Source: Public Institutions Shared Enrollment & Graduation Information System, Illinois Board of Higher Education

Table 3: Attainment, Enrollment, and Non-Persistence Among Illinois Latino 1st-Time Freshmen

Year	*BA's Awarded 1994*	*Still Enrolled 1994-95*	*Left School No Degree*
1986-87	39.8	7.1	53.1
1987-88	42.5	10.5	47.1
1988-89	42.8	13.6	43.6
1989-90	38.3	20.0	36.0
1990-91	30.2	33.8	36.0

Source: Public Institutions Shared Enrollment & Graduation Information System, Illinois Board of Higher Education

In response to recent public scrutiny on the increasing cost and time involved in completing a bachelor's degree, the American educational system is seriously exploring ways to increase persistence to graduation. Universities and colleges are being called upon to re-examine undergraduate education in order to provide a cheaper and more efficient path towards the attainment of a degree. In order to invoke successful strategies to improve the efficiency and quality of educational delivery today a probe into past experiments is necessary.

Experiments with timely degree completion have most often been attempted as a response to heightened pressures of the times. War, economic conditions, college costs, changing work patterns, increased participation of women in the work force, and students' demands for an accelerated curriculum have motivated universities and colleges to explore and utilize methods that would reduce the time necessary to complete a degree.

Methods used for reducing the time spent in the classroom have included: using proficiency exams, course loads of 18 hours and more, integrating summer semesters into the schedule of instruction, awarding credit for acquired knowledge through Advanced Placement (AP) and the College Level Examination Program (CLEP). More recently, learning assessment techniques such as portfolios, interviews, and hands-on demonstrations geared toward the increasing adult student population have been implemented (Witthuhn, 1996).

Past observations on experimentation of time to degree have led institutions to begin focusing their policies and objectives on the individual needs of the students. One population that needs institutional evaluation is Hispanic/Latino* students who are significantly underrepresented throughout the entire educational system. Although they comprise the fastest growing minority population in the United States, Hispanic college attendance is the lowest among all minority groups.

The Hispanic Reality

The current population of the United States by race & ethnicity can be seen in Table 4. Of our current population of 266.5 million, what are the number and age distributions of the youth in our educational system? The most recent data available is taken from a report entitled "School Enrollment — Social & Economic Characteristics of Students: October 1995" (Update) issued on April 1997 by the U.S. Bureau of the Census.

- 70 million are enrolled in regular schools - nursery through college.
- 8.3 million children enrolled in nursery school or kindergarten.
- 31.8 million are enrolled in elementary school (grades 1-8).
- 15 million in high school.
- number of persons enrolled in college totaled 14.7 million, significantly, 6 million of which, or 41%, were 25 years or older.

*THE TERM "HISPANIC"

The term "Hispanic" is an umbrella term created in the 1960's to refer to the over 20 ethnic groups of Spanish or Latin origin, including Spain, Central and South America and the Caribbean: Persons of Hispanic/Spanish origin are those who classify themselves in one of the specific Hispanic origin categories listed on the census questionnaire — Mexican, Puerto Rican, Cuban, or "other" Hispanic/Spanish origin. Persons of "other" Hispanic/Spanish origins are those whose origins are from Spain, the Spanish-speaking countries of Central or South America, or the Dominican Republic; they are persons of Hispanic origin identifying themselves as Spanish, Spanish-American, Hispanic, Latino, etc.

Origin can be viewed as the ancestry, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. Hispanic/Spanish origin is not a racial category. Therefore, persons of Hispanic origin may be of any race (U.S. Bureau of the Census, 1990). The term "Hispanic" is used for convenience, much the same way "Asian" is used to refer to the many ethnic groups from countries like China, Japan, Korea, and Vietnam. It is important to note many Hispanics do not self-identify this way. As with other ethnic groups, many prefer recognition based on national origin, like Puerto Rican or Venezuelan; still others use Latino or Chicano. Within this report, Hispanic and Latino is used interchangeably.

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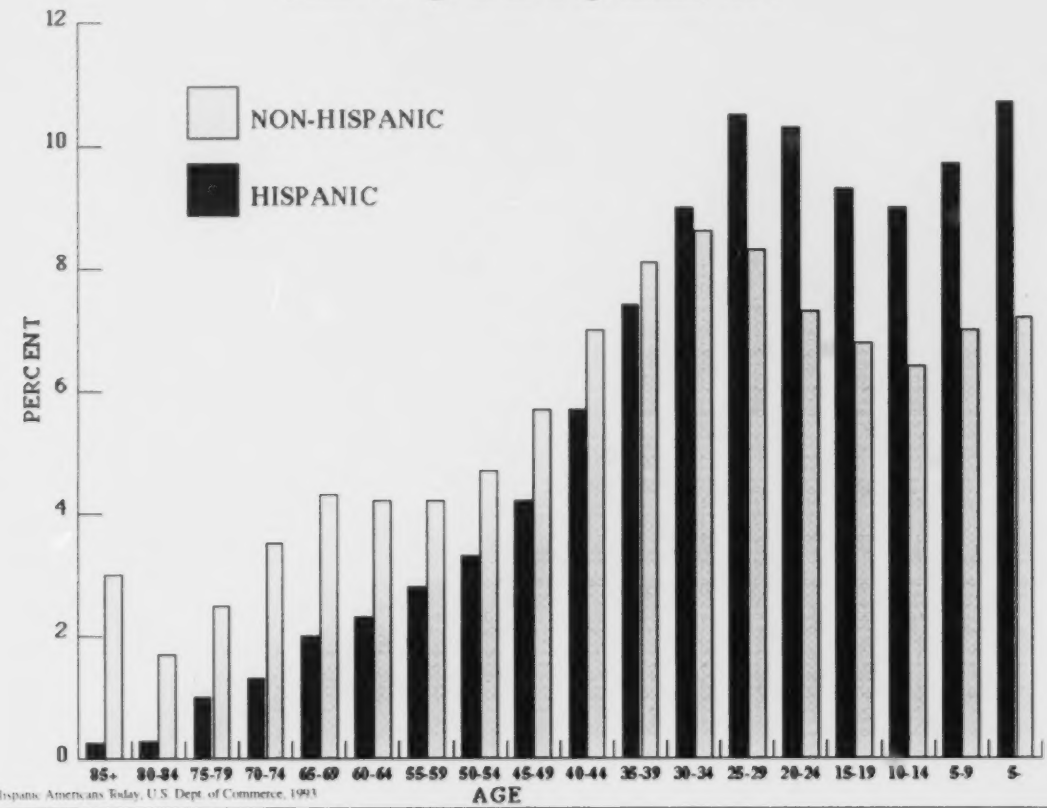
Table 4: Estimates of U.S. Resident Population,
by Race and Hispanic Origin, July 1, 1996

Race/Ethnicity	*Number in Millions*	*Percent of Population*
White	219.75	74.7
African-American	33.50	11.3
Asian Pacific Islander	9.74	3.3
American Indian Eskimo, Aleut	2.28	1
Hispanic *May be of any race*	28.67	9.7
Total	**293.94**	**100.00**

Source: U.S. Bureau of the Census, (1997, May). Census and You, 32 (5) 6.

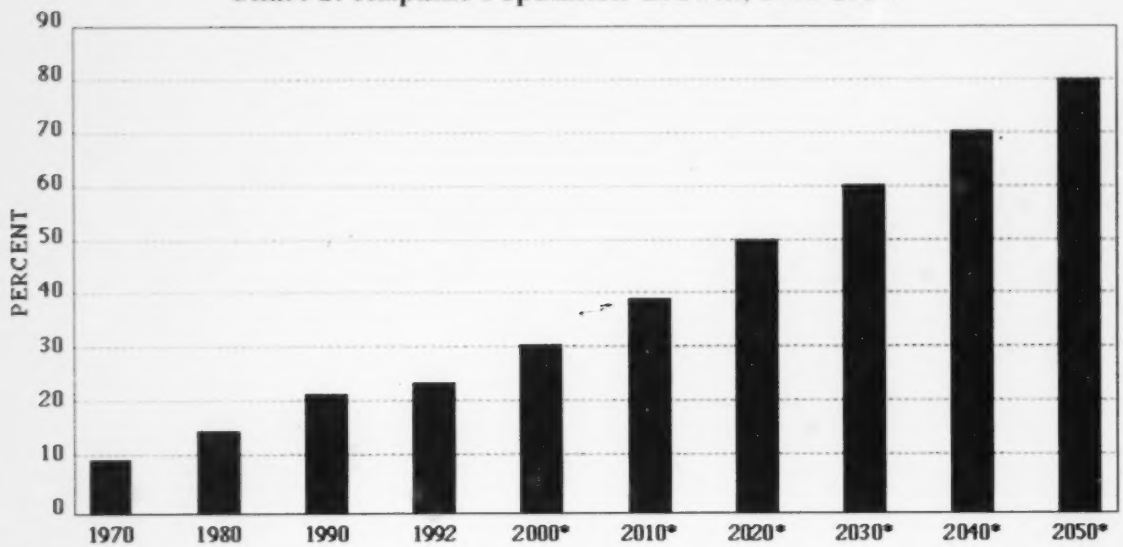
Of the more than 28 million Hispanics living in the United States, the large majority are of school age, as can be seen from the Age of Population bar chart (see Chart 1). As this chart was compiled using 1990 census data, these are children who are now in our educational system. The U.S. population is expected to increase by close to 70 million in the next 30 years. What are the implications and where will the growth be seen? Hispanics and Asians will account for 61% of the population growth from 1995 to 2025 — 44% from Hispanics and 17% from Asians (Census Brief, Dec. 1996). Hispanic/Latinos comprise the fastest growing minority population in the United States. It is expected that, soon after the turn of the century, the Hispanic population will become the largest minority population in the United States: within 50 years, it is projected that 1 in 4 Americans will be Hispanic (see Chart 2).

Chart 1: Age of the Population, 1990



Source: Hispanic Americans Today, U.S. Dept. of Commerce, 1993

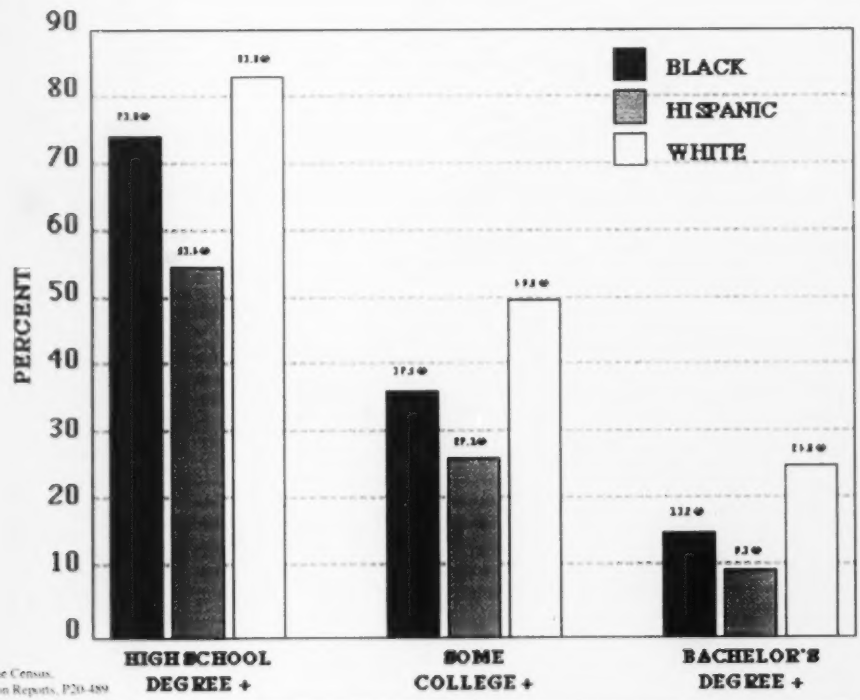
Chart 2: Hispanic Population Growth, 1970-2050



Source: Hispanic Americans Today, 1993;
U.S. Bureau of the Census, Current Population Reports, P23-182

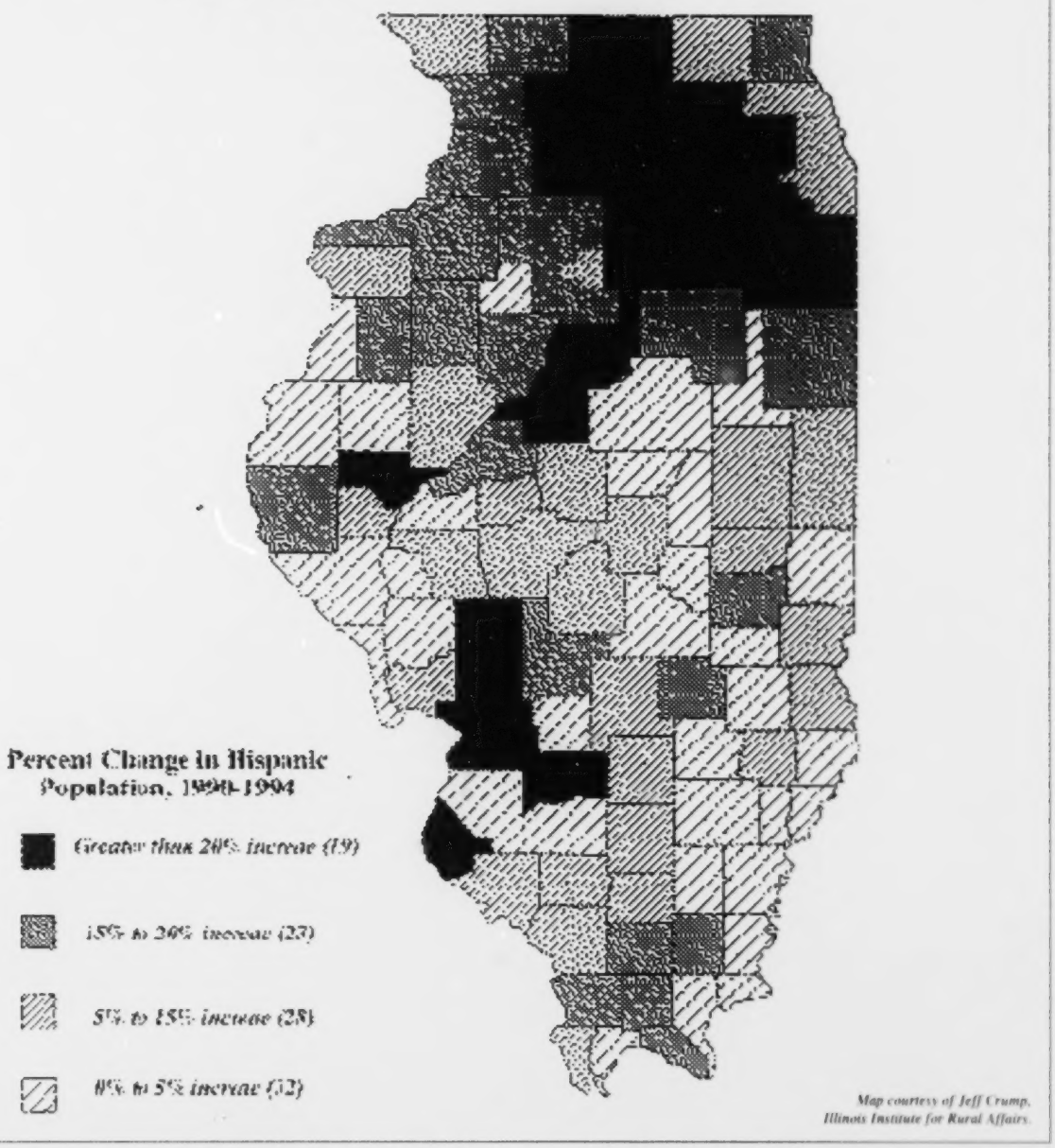
Chart 3: Educational Attainment, by Race & Hispanic Origin, March 1995

25 Years and Older



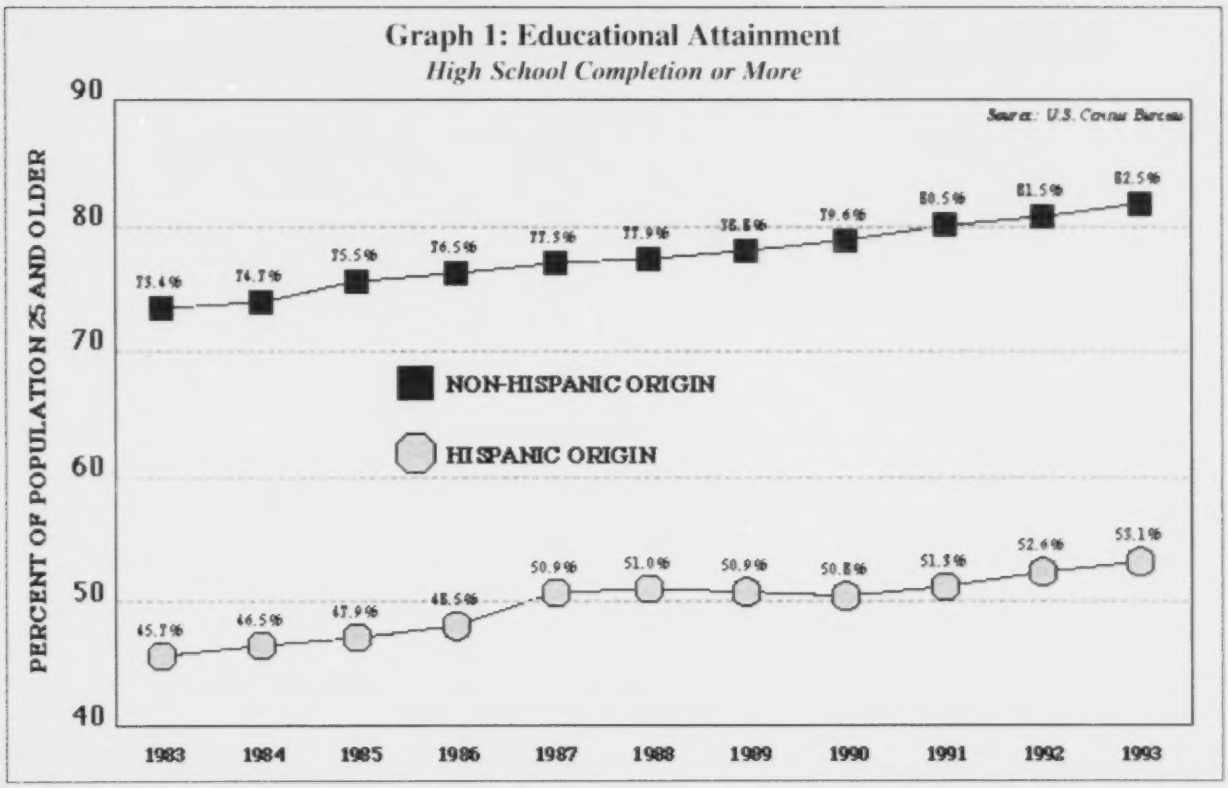
Source: U.S. Bureau of the Census,
Current Population Reports, P20-489

Map 1: Hispanic Population in Illinois, 1990-1994


Percent Change in Hispanic Population, 1990-1994
Greater than 20% increase (19)
15% to 20% increase (23)
5% to 15% increase (28)
0% to 5% increase (32)

Map courtesy of Jeff Crump, Illinois Institute for Rural Affairs.

The map of Illinois shows, by county, the percentage change in Hispanic population in the state of Illinois from 1990-94. Now that we have seen current and projected population, where do we stand as a nation concerning educational attainment? Of adults 25 years or older, 82% had completed high school and 23% had earned a bachelor's degree or more. Both figures are the highest ever recorded in the nation. However, when broken down by race and Hispanic origin, clearly there is still a tremendous disparity. Of Hispanics 25 and older, 53% completed high school, half or 27.1% completed some college, and 9.3% earned a bachelor's degree or more (see Chart 3). For a look at the educational attainment of Hispanics over the last decade, see Graph 1 which shows the progress from 1983-1993.



Realities of Timely Degree Completion

As the acquisition of academic credentials becomes increasingly expensive and the amount of money available for grants and loans is reduced, institutions are being pressured to modify their educational delivery, to promote more efficient access and a more seamless progression for a timely degree completion. According to the Higher Education - Tuition Increasing Faster than Household Income and Public Colleges' Cost, a report submitted by the U.S. General Accounting Office (1996), "paying for college education, even at public 4-year colleges and universities, now ranks as one of the most costly investments for American families." It goes on to state that "to deal with students'increasing financial burden, colleges and universities have undertaken a variety of initiatives, including holding down tuition increases, making paying for college easier, and streamlining students' progress to graduation to keep their total charges lower. Because some of these efforts are in the early stages of planning and implementation, little has been done to analyze or evaluate their effectiveness."

One strategy that has been implemented to help decrease the cost of a university education can be found by browsing through Internet home pages of collegiate institutions across the nation such as Wittenberg University, Moorehead State University, Oswego State University, University of the Pacific, Montana State University at Bozeman, University of Iowa, California State University, and Indiana University. All of these institutions now offer graduation guarantees to ensure that students in selected undergraduate curriculums will be able to finish their degrees within four years or the additional courses needed to meet graduation requirements will be tuition-free. While the specific nature of the "graduation guarantees" differ among the various institutions, each plan attempts to address legitimate concerns arising from issues of institutional accountability, integrity, and responsibility.

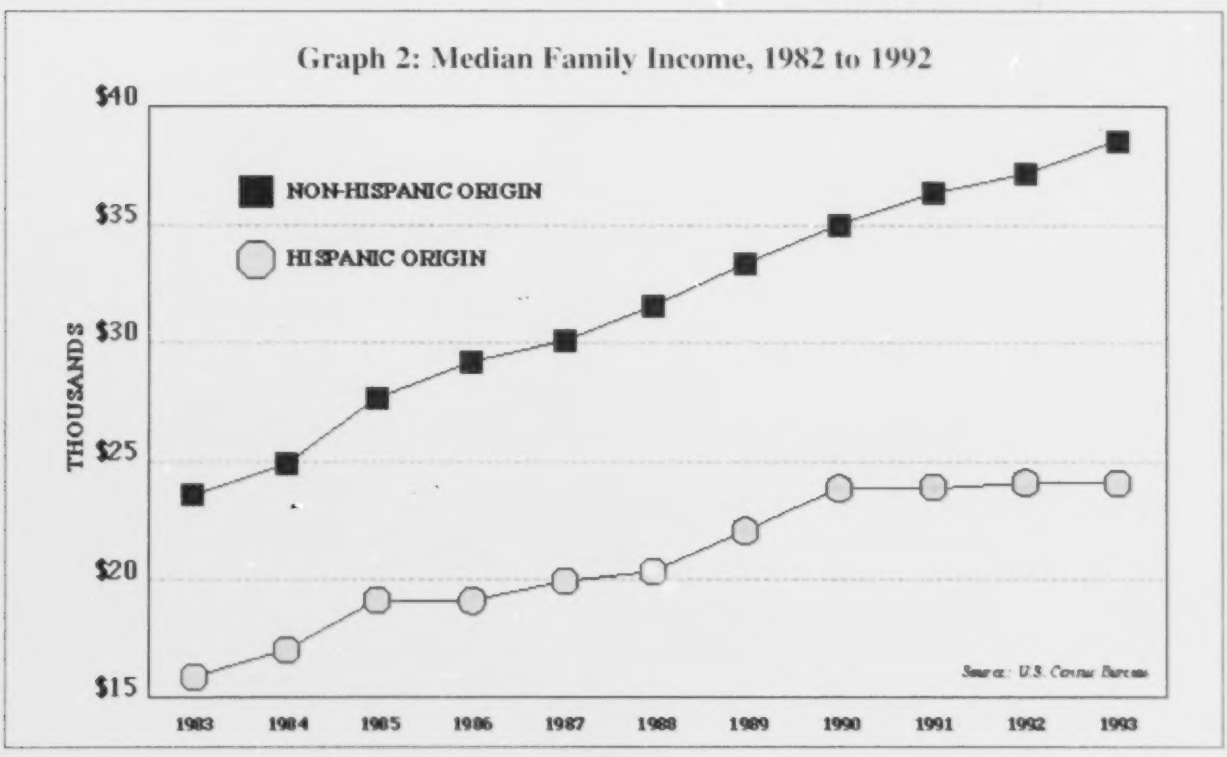
The recent outpouring of these graduation guarantees at colleges and universities across the country is further evidence to the increasing sensitivity to taxpayer and legislative demands for greater accountability in higher education. Taxpayers, too, have a vested interest in student persistence and timely degree completion because tax dollars support both the public and private institutions of higher learning. Questions of accountability, integrity, and responsibility that arise need to be properly addressed in order to make the educational enterprise as efficient and cost effective as possible. The ultimate goal is and always has been, making a college education attainable for those who desire one. Affordability is only one aspect, albeit prominent, and tied directly to time to degree. Financial considerations as well as other equally valid barriers exist for Latinos, some of which will be addressed throughout this document.

Hispanics in Their Quest of Timely Degree Completion

Critical to Hispanic/Latino students and their families is the overall cost of earning a degree. Parents required to pay or assist in the financial need for four years of education will be more supportive of educational programs and initiatives than those parents paying for a fifth and sixth year of a college education. State legislatures also are beginning to set limits on the subsidized number of credit hours and semesters of enrollment that students can take as undergraduates as evidenced by proposals at universities to increase tuition once students exceed a certain number of hours beyond specific graduation requirements.

As reported by the American Council on Education (1994), it was found that most (84%) Hispanic/Latino students do not follow the "traditional college path" (defined as entering a 4-year institution on a full-time basis in the fall immediately following high school graduation) providing an estimated 6-year college completion rate as a range: from 4% for students who start on a non-traditional path to about 31% for those who follow the traditional route.

More important is the recognition that barriers to a timely degree completion deprive individuals of the potential income they could be earning, especially ethnic minority students. As supported by a report by the National Center for Education Statistics' Youth Indicators 1996 and the U.S. Bureau of the Census, it is estimated that more than 41% of Hispanic children live in poverty and over 25% of Latino families live below the poverty level. Clearly, quicker entry into a productive earning status could help reduce these numbers. Refer to Graph 2 for a 10-year look at Family Income 1983-1993.



When looking at Hispanic/Latino student populations (see Table 1) it is apparent that the percentage of students who finish their degrees in four years is significantly lower than the total student population. Not only do Hispanic/Latino students face the same barriers that affect other students, but they must also contend with unique barriers that they encounter at various levels of the educational system. In order to better understand the Hispanic reality, the remainder of this article will address some of the major problems and barriers faced by Hispanic students in terms of timely degree completion as well as strategies that can be implemented to overcome them.

Education at the Elementary and Secondary Level (K-12)

Unfortunately, many of the problems that are experienced by Hispanic/Latino students do not begin in junior high or high school. Rather, many of these problems begin in the K-6 educational settings. According to the Condition of Education 1995, published annually by U.S. Department of Education, the persistence of sizable developmental differences between young children from low-income or low-education families and more advanced children suggests that attempts to "level the playing field" by providing early interventions and compensatory resources have not gone far enough or are not succeeding.

A recent study cited in the same source, describes researchers who looked at pre-schoolers and their readiness to begin school by measuring their emerging literacy and numeracy, small motor development, gross motor functioning, general health, social and emotional development, and speech development. Along with these factors, socio-demographic risk factors defined as official poverty level, level of parental education, having parents who have not completed high school, being born to a mother who was unmarried at the time of the child's birth, living in a single-parent family, and having a mother who speaks a language other than English were also observed.

Hispanic/Latino children are reported to show fewer signs of emerging literacy and more indications of physical activity-attention difficulties than non-Hispanic children, and their general health status is not rated as high. According to the American Council on Education (ACE), it is estimated that nearly one-third of Hispanic/Latino elementary school children drop-out of school before the 6th grade compared to 5% of non-Hispanic students (ACE, 1995). This data suggests that high school drop-out rates are misleading in that a large percentage of children do not even make it that far in the educational pipeline. Additional American Council on Education reports indicate that Hispanic/Latino students' educational achievements begin to fall behind non-Hispanic students during the elementary grades (ACE, 1995, 1996).

The ACE (1995) analysis further reports that the drop-out rates suggest that up to 50% of Hispanic/Latinos of high school completion age fail to complete high school and that high rates of absenteeism, lack of academic success, repeated suspensions, low parent involvement, teenage pregnancy, low self-esteem, and low average grades are associated with dropping out of school. Hispanic/Latino students who completed high school in the past ten years have consistently shown low test scores in college entrance exams (ACT & SAT) which is evidence of weaker academic preparation. At the national level, the average ACT test score is 21. Among Mexican-Americans, it is 18.8 and 19.0 among other Hispanics. Inadequate college track preparation is a notable problem nationally for all students, as seen in Table 5. Less than a quarter of our nation's high school graduates have taken the number and subjects in high school required to enter public universities. Of the four ethnicity's outlined, Hispanics are the least prepared in terms of courses taken.

Table 5: Percentage of High School Graduates Earning Credits Recommended by NCECS*

Racial/Ethnic Group	*1982*	*1992*
Black	.7%	21.5%
Hispanic	.5%	19.9%
White	2.2%	23.6%
Asian	6.0%	29.3%

Source: U.S. Department of Education, Digest of Education Statistics, 1995

*National Commission of Excellence for College-Bound Students recommends the following minimum credit course combination: 4 English, 3 Science, 3 Math, Computer Science, and 2 Foreign Language.

Through extensive review of the literature and governmental documentation it was found that, despite significant progress in recent years in outreach, recruitment, and retention efforts at university and college campuses, the educational attainment of Hispanics remains well below that of the rest of the population. As reported by the Harvard Family Research Project (1996, pg. 3) "research addresses cultural continuities and discontinuities between home and school for Latino children, particularly regarding values that relate to education." Researchers are now focusing not on the discontinuities, but on continuities.

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They report that the concept of education refers to the total task of bringing up a moral and responsible child, that education means teaching children important lessons, including the difference between right and wrong, respect for parents and elders, and good manners. Integrated in this concept is the importance of morality, respect, and family unity, as well as high expectations and aspirations for children's academic and educational success. Table 6 shows the educational expectations of Eighth graders in 1988 and again in 1992. In both cases, a little over half of the students surveyed expected to complete at least a bachelor's degree. In spite of this, the high school graduation rate remains around 50%. Of these high school graduates, fewer than 40% of Hispanics ages 18-24 were enrolled in 1993 (see Chart 4). The percentage of Hispanics who have earned at least a bachelor 's degree as of 1995 is 9.3% (see Chart 3).

In this paper we argue that the key to preparing Hispanic/Latino youth for future challenges is to instill in them, at an early age, the importance of the quest for knowledge through education. Education is essential for making informed decisions that will have to be made in the future by today's Hispanic youth.

Hispanics in Higher Education

It is our philosophy that if institutions of higher education are to succeed in providing educational opportunities, they must first accept the reality that the Hispanic/Latino student population faces unique difficulties apparent in the low rates of enrollment and degree attainment. Second, the direction institutions must take is to recognize the crucial elements in educational attainment for Hispanic student populations, and take initiatives to ensure that links between these parts exist and are strong and supportive of one another. Finally, that all stakeholders join together in a common goal — education. Our research suggests that better outreach from institutions, including support services available for the student as well as the family, can show dramatic results. This outreach include striving to build partnerships with elementary and secondary schools, junior colleges, community organizations and families.

One example of a successful program that incorporates all of the above is the Hispanic Program for Educational Advancement, a cooperative program between Western Illinois University and Black Hawk College.

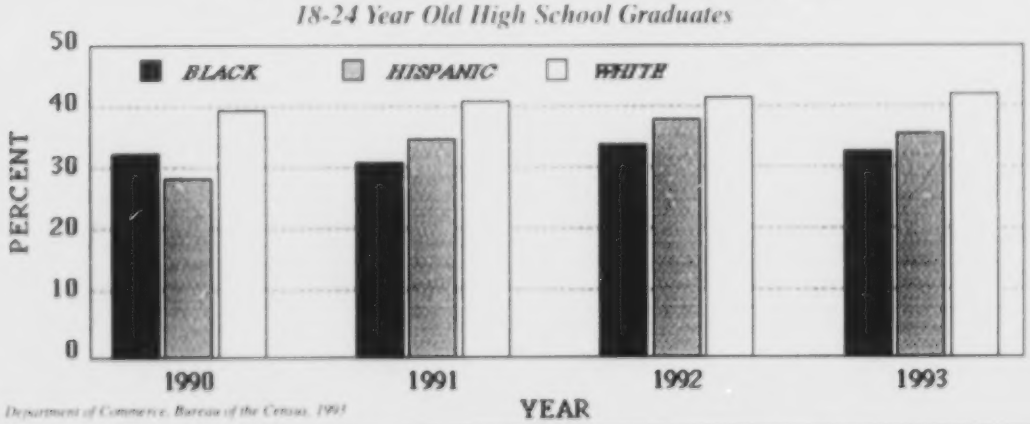
Table 6: Percentage of 1988 Hispanic 8th Graders Indicating in 1988 and 1992 the Highest Level of Education They Expect to Obtain

	Less Than High School	*High School Graduate*	*Some College or Vocational School*	*Bachelor's Degree or More*
1988	2.3%	13.1%	29.8%	54.8%
1992	4.2%	9.4%	33.8%	52.7%

Source: Descriptive Summary Report, National Center for Educational Statistics, U.S. Department of Education, 1994

Chart 4: Enrolled-in-College Participation Rates

18-24 Year Old High School Graduates



Source: U.S. Department of Commerce, Bureau of the Census, 1993

Created as an academic support and outreach program, and designed to increase the number and academic success of Hispanic Students desiring a post-secondary education. To accomplish this, five priority service areas have been identified:

1) retention and graduation of currently enrolled Hispanic students at Western Illinois University and at Black Hawk College;
2) increasing enrollment of Hispanic high school graduates in Illinois institutions of higher education;
3) providing access and educational opportunities to youth and to the young adult Hispanic population of the Quad Cities and Rockford areas;
4) supporting state wide parental and community involvement in educational issues of Hispanic youth and other ethnic minority populations in these areas;
5) program expansion and service delivery into other underserved areas.

Direct and indirect services are provided in the form of academic advising, peer mentoring, tutoring, financial aid assistance, child care, academic support programming, workshops and seminars, outreach programming for elementary, junior high, and high school students, teachers and staff, and continuous community outreach activities. Enrollment, retention and graduation rates at both institutions for the last eight years show a dramatic and steady increase in the numbers of every category. (see Tables 7 and 8)

Table 7: Black Hawk College Enrollment
Hispanic Students

Year	*Number Enrolled*	*Percent Change*
1989-90	212	--.--
1990-91	250	+17.9
1991-92	317	+26.8
1992-93	374	+18.0
1993-94	413	+10.4
1994-95	435	+5.3
1995-96	476	+9.4
6-Year Total Change	**264**	**+124.5**

According to National Center for Education Statistics (NCES), over 67% of Hispanic/Latino students enroll in 2-year schools compared to 24% enrolling in 4-year institutions (NCES, 96-851). The American Council on Education's findings demonstrate that Hispanics have the lowest rate of degree completion among all racial and ethnic groups (ACE, 1995). Hispanic/Latino students also have consistently low academic achievement at the elementary and secondary education levels (ACE, 1995). As a result, any comprehensive strategies addressing timely degree completion for Hispanic/Latinos must address problems located within the community colleges and within student's pre-collegiate background.

Table 8: Hispanic Student Enrollment and Graduation
Western Illinois University

Year	*Number Enrolled*	*Percent Change*	*Number of Graduate*	*Percent Change*
1989-90	190	--.--	32	+52.00
1990-91	171	-10.0	42	+31.00
1991-92	206	+20.4	26	-32.00
1992-93	248	+20.4	38	+46.00
1993-94	269	+8.4	44	+16.00
1994-95	288	+7.0	57	+30.00
1995-96	301	+4.5	58	+1.75
1996-97	313	+4.0	63	+8.62
7-Year Total Change	**123**	**+64.7**	**31**	**+100.00**

In a preface to its 1995 report, The Educational Progress of Hispanic Students, the National Center for Educational Statistics made the following statement:

> *Education has always been seen as a means of upward mobility, especially for those who are socially and economically disadvantaged. Hispanic children are likely to be at an educational disadvantage relative to Whites for several reasons, including a greater likelihood of living in poverty and lower average levels of parental education. A larger percentage of Hispanic students also attended disadvantaged schools where the overall academic and supporting environments are less conducive to learning. In addition, a much larger proportion of Hispanics than non-Hispanics are foreign-born, meaning that Hispanic children are less likely to hear or speak English at home and are more likely to have limited English proficiency (NCES, 1995).*

As this brief narrative suggests, Hispanic/Latino students clearly face enormous challenges in acquiring a college education as a result of numerous institutional, cultural, and educational factors.

What is different about a college education today that seemingly requires students to spend additional time and money to earn a degree? It was believed that the problem would lie with either: **1)** institutional accountability or **2)** student responsibility, including dealing with issues such as those mentioned above, or a combination of both. If the results determined that the main issue discouraging timely degree completion was centered upon the student's responsibility, then we would need to find out what could be done to encourage more students, especially those from Hispanic/Latino communities, to finish their undergraduate degrees in four years. As this article will attempt to demonstrate, questions about timely degree completion must be tested against a variety of expectations, goals, assumptions, and realities.

The Research Agenda

The issue of barrier identification and elimination is one of the most important issues associated with timely degree completion. Although, Hispanic/Latino students often encounter barriers common to most students, there is evidence that states that unique experiences are a reality to this ethnic group. While most students may indicate that poor advising, changing majors, or lack of course offerings are significant causes of delay, others mention more complex barriers such as hidden pre-requisites, undefined competencies, and inadequate career guidance. Hispanic/Latino students lack the knowledge-based requirements of the overall undergraduate career due to, in some cases, inadequate academic advising during the entire academic career. Unless these and other barriers are properly addressed by colleges and universities, Hispanic/Latino students will continue to be forced to take additional semesters of course work and continue the trend of a high attrition rate.

Given the existing state of education of Hispanic/Latinos. A study was undertaken by the Cross Cultural and Hispanic Program for Educational Advancement, in conjunction with the Office of the Provost at Western Illinois University, in order to discover how this institution could better serve its Hispanic population. The objective of this study was to answer the following fundamental questions. What barriers exist for Hispanic/Latino students in higher education and timely degree completion? Are these barriers unique to this population? Are there artificial, or systemic barriers that could be eliminated or overcome by changing institutional policies? What can be done at each level of the educational system to allow more students to achieve success? The key question we strove to answer: *"How do we connect the parts?"*

Entering into this research jointly was the first step in connecting the parts for student success on the WIU campus. The study was conducted to identify barriers and successful strategies appropriate for implementation on a wider scale. A national literature review was completed over the course of a year. Professional journals, government agencies, Hispanic and non-Hispanic organizations, and experts in the field of education were among some of the avenues researched. All 50 Boards of Higher Education were contacted in search of existing model programs for Hispanic timely degree completion.

Hundreds of Hispanic students, administrators, faculty, staff and parents across Illinois were questioned via personal interviews, focus groups, and questionnaires to obtain insight into their individual experiences, obstacles and successes. Targeted in this research were:

- Elementary, junior high and high school students and their parents.
- College students at 2-year and 4-year institutions and their families.
- High school guidance counselors, college admission counselors, transfer coordinators.
- Administrators at every level.

Therefore, this study is expected to provide educators with the basis for the formulation of meaningful prescriptions for the implementation of outreach activities, and sound academic support for Hispanic/Latino students at all levels of the educational system of this country.

Major Factors – Timely Degree Completion for Hispanics

Entrance Examinations

Entrance exams are a major determinant for gaining potential college admission and scholarships. Scores on ACT, PSAT, and SAT tests contribute to a student's acceptance to a school, quality of school a student may choose, ability to receive scholarships, and acceptance into honors programs. In addition to inadequate preparation, Hispanic students are often unaware of testing possibilities and implications resulting from a failure to take the test. Interviews uncovered that tracking still exists and, in some cases, guidance counselors discourage Hispanic students from taking the ACT/SAT. For national SAT participation rates by race/ethnicity refer to Table 9.

Minimal Use of Advanced Placement

One reason cited by experts in the field as to why Hispanic students take longer than four years to complete their degree is the use of available tools. For example, use of Advanced Placement and CLEP to complete a degree in a timely manner is disproportionate for minority students. The dearth of parental knowledge and involvement, as well as poor academic guidance, are the cause of this disproportionate result in completion. In addition, it can be inferred that some individuals in decision-making positions at schools have their mind set as to what the full potential of Hispanic students is. This clearly provides a picture of the lack of: **1)** encouragement Hispanic students receive in order to achieve their full potential, **2)** opportunities to make choices, **3)** and equal opportunity in the educational system.

The following figures representing national AP participation rates appeared in The Educational Progress of Hispanic Students: Pluses and Minuses, published in 1996 by The College Board (see Table 10).

Exposure and Access to Resources

The explosive growth in the use of computers is radically changing the way faculty teach and students learn. Students with skills in using spreadsheets, graphics and multi-media presentation tools, as well as the Internet, have an advantage in compiling, organizing and presenting information in their classes. In addition to the organization and presentation edge, students knowledgeable in the Internet can have immediate access to international resources (ACHE, 1994).

Table 9: SAT Participation

Total Number of Participants and Percentage by Race and Ethnicity

Race/Ethnicity	*1991*	*1992*	*1993*	*1994*	*1995*
Black	9.7	9.6	9.9	9.8	9.7
Hispanic	*6.4*	*6.7*	*7.0*	*7.4*	*7.5*
White	66.5	65.8	64.2	63.0	63.1
All Races/Ethnicities	***1,032,685***	***1,034,131***	***1,044,465***	***1,050,386***	***1,067,993***

Source: The Educational Progress of Hispanic Students: Pluses and Minuses. *A Summary of Achievement by Hispanic Students in College Board Sponsored Programs* (1996) The College Board

Table 10: Advanced Placement Participation

Total Number of Candidates in Public Schools, and Percentage by Race and Ethnicity

Race/Ethnicity	*1991*	*1992*	*1993*	*1994*	*1995*
Black	4.3	4.3	4.5	4.7	4.8
Hispanic	6.5	6.9	7.2	7.5	7.9
White	69.9	68.7	67.7	66.8	66.5
All Races/Ethnicities	***281,628***	***307,073***	***338,889***	***368,780***	***407,030***

Source: The Educational Progress of Hispanic Students: Pluses and Minuses. *A Summary of Achievement by Hispanic Students in College Board Sponsored Programs* (1996) The College Board

Students entering college without computer literacy are finding it increasingly difficult to compete with their peers. Based on the results of the National Assessment of Educational Progress (NAEP) and other studies, it is clear that a disproportionate percentage of minority students entering higher education today are not equipped with the skills and knowledge to use the new information and communication technologies. This problem stems in part from the inequities in access to and use of computers and related technologies in their pre-collegiate preparation, and the low number of Hispanic students who have a home computer. Unless the present trend is reversed, these students are in danger of becoming a new class of information-disadvantaged students.

> *Students in today's technology-rich higher education environments are presented with unprecedented opportunities to use and integrate the new technology tools and information resources in their studies. Regrettably, many minority students are entering higher education without the skills and experience necessary to immediately and effectively make use of these resources (Justiz et al, 1994).*

Community College Choice

Issues of articulation are also raised when one considers the problems or barriers that prevent students from finishing their degrees in a timely manner. The current trend demonstrates that a high percentage of ethnic minority students, especially Hispanic/Latino students beginning their undergraduate experience at a community college, discover that a large number of courses they have taken do not transfer to a senior institution. Inadequate articulation agreements and the lack of appropriate academic advising are two chief causes. Often students are misled by the lower costs associated with community colleges and continue their enrollment through more than 60 credit hours of lower division course work, assuming incorrectly that this additional course work will transfer to the senior institution. The following tables demonstrate the percentage of Hispanic/Latino students who complete a degree based on enrollment and institution type.

Table 11: Degrees Attained by Hispanics

Spring 1994

	None	*Certificate*	*Associate's*	*Bachelor's*
After Enrolled 4 Years	55.0	15.7	11.5	17.8
Began in 4-Year Institutions	49.4	1.3	2.1	47.2
Began in 2-Year Institutions	61.8	15.3	16.4	6.6

Source: Descriptive Summary of 1989-90 Beginning Post-Secondary Students 5 Years Later, May 1996.

Table 12: Importance of Living at Home
As Criteria in Selecting a College

Ethnicity/ Race	*Very Important*	*Less Than Very Important*	*Attend In State*
Asian/ Pacific Islander	14.3	85.7	77.8
Hispanic	22.7	77.3	83.2
Black	9.6	90.4	65.5
White	8.4	91.6	71.7

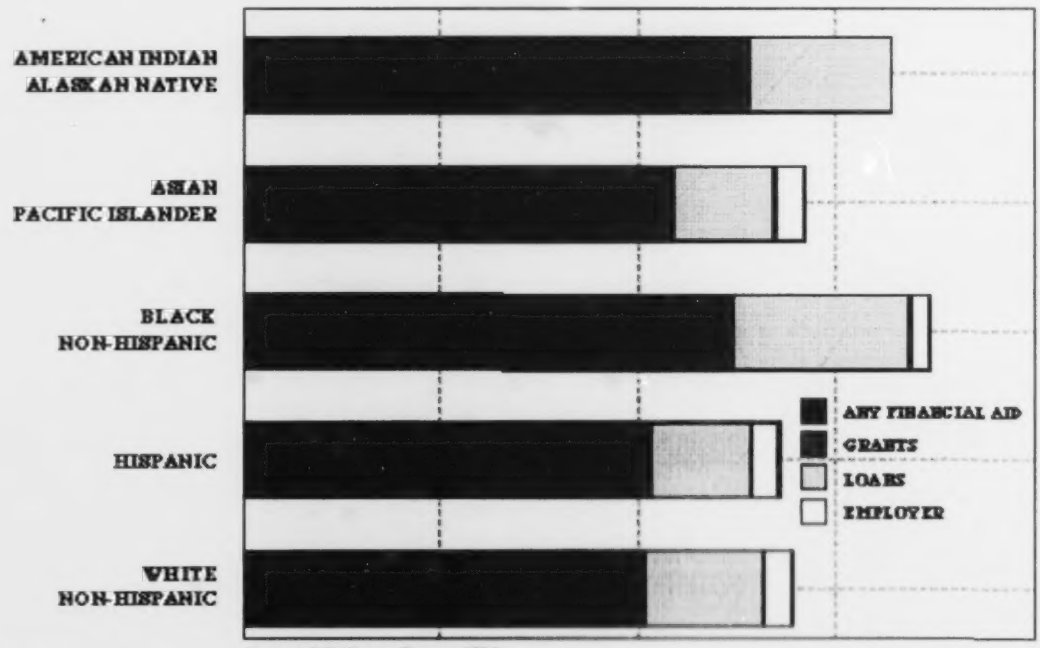
Source: National Educational Longitudinal Study 1988-1994, NCES 96-175

The Distance Factor

An important factor to consider is the distance the Hispanic/Latino student will travel in order to obtain a college education. In a report published by Post Secondary Education Opportunity (1996), data demonstrates that Hispanic/Latino students travel an average of 21 miles from their home to enroll in college freshmen courses. Consequently, Hispanic/Latino students most often begin higher studies at community college setting, as a consequence, they have limited collegiate opportunities available. According to the Harvard Family Research Project: Supporting Latino Families, "in Latino families, tensions may arise between older and younger generations, particularly if younger family members take on values and lifestyles that conflict with those of older, more traditional family members" (1996).

The family pressures of either living at home while attending community college and, therefore foregoing full-time employment, or the separation of being a long distance away from family for an extended period of time, may be a reason behind retention numbers decreasing for the Hispanic/Latino students in institutions of varying types. Table 12 demonstrates the importance of living at home as a consideration when selecting a college or university for Whites, Blacks, Asians and Hispanics. Living at home was by far the most important for the Hispanic students surveyed, with 22.7% responding Very Important as a consideration. This is more than twice as much than for the Black population, and nearly three times as many as Whites.

Chart 5: Types of Financial Assistance Received
By Ethnic Group



Source: U.S. Census Bureau, 1996

Financial Issues

Because of lower family incomes, Hispanic students are more likely to have/maintain a job while attending school. Analyzing Graph 2, there is a notable income differential for Hispanics as compared to the non-Hispanic population. This income differential clearly demonstrates that the Hispanic population of the United States faces a substantial burden. The end result forces students to take fewer classes, drop out of school, and the possibility to delay timely degree completion. The financial need within the family and the sense of responsibility do not allow the student to weigh the benefits of attaining a degree, which would result in higher income potential for the future.

In addition, work reduces available study time and may result in hurting a student's academic success or degree completion. Enrollment is increasing for students of color. Now graduation rates need to be the focus. More Hispanic students are attending college, but fewer are completing their degrees. The above recommendations will go a long way in an individual institutions endeavor to graduate its students in a timely manner. This should be the focus of attention at colleges and universities across the nation.

Strategies for Timely Degree Completion

Given the focus to identify barriers preventing Hispanic/Latino students from finishing their degrees more quickly, it is appropriate to discuss strategies for overcoming these barriers. In this concluding section, a series of recommendations for timely degree completion are described, and can be used by institutions that are attempting to encourage more timely degree completion. Additionally, several strategies and recommendations specifically targeted at Hispanic/Latino students are discussed. These strategies are the result of the extensive field research discussed above. While some recommendations may be more pertinent to specific institutions, the following ideas represent options that can be accomplished without diminishing program quality.

Higher education can only work with the students that make it that far, however. The next step is by increasing the number of students of color who make it through the K-12 pipeline. The school system needs to be examined, one district at a time, to determine where the breakdown in education is occurring for students of color. Beginning with elementary school, and continuing through junior high and high schools. If students continue to drop out of the system at any point, the system breaks down. Only by increasing the success of our K-12 levels, will we ensure that more students make it through the pipeline, and are well prepared to succeed in their college career.

Until that time, institutions of higher education can only initiate band-aid solutions. The only way dramatic and lasting improvements can be realized, is through the efforts of K-12 school systems, and the community in conjunction with higher education. To that end, the authors make the following recommendations, which have been derived through research, experience, and practice of successful model programs, ranging from kindergarten through college.

Pre-Collegiate Initiatives

There are strategies that can be adopted or explored to benefit students within the Hispanic/Latino community before they reach the university. To eliminate barriers at the pre-collegiate level specifically for Hispanic/Latino students and to develop better relationships with the Hispanic community, public schools must:

1. *Provide multicultural training to all teaching faculty, administrators, and support staff dispelling any myths and stereotypes which may exist.* The existence of these can lead to lowered expectation and tracking. We can hope that, by observing the new attitudes of staff, students will also learn to appreciate the culturally diverse atmosphere. Promote Hispanic/Latino cultural celebration activities within the school's environment. Promote extracurricular activities that develop self-esteem, cross-cultural appreciation, and cultural pride. Mandate teacher training strategies addressing specific ethnic and cultural issues. Include bilingual and cultural representative literature in library collections.

2. *Introduce the concept of academic achievement and excellence at the lowest educational levels (K-6).* Encourage parent/student training on the negative aspects of truancy and absenteeism. Promote parent and student participatory agreements for academic excellence. Encourage partnerships between the community and area colleges and universities.

3. *Introduce the concept of career opportunities with encouragement for educational training beyond the secondary school.* Promote enrollment in college prep courses in the junior high school. Offer SAT/ACT/PSAT preparation workshops. Offer college AP courses at the high school, taught by college faculty.

4. *Emphasize degree completion at all levels.*

5. *Involve members of the Hispanic community as active participants in the school Parent Teacher Organization (PTO) and as members of the School Board.* Create cross-cultural advisory boards with membership representative of cultural bases.

6. *Work with Hispanic families: listen to and address their concerns.* Encourage campus visits of high school students and parents to increase comfort level and awareness. Develop parental involvement strategies to better involve the Latino parents as active members in the college decision making choice. Host cultural and ethnic round tables to discuss ethnic differences (Members of different ethnic or cultural backgrounds must be given the opportunity to discuss culture specific issues with others.) Encourage bilingual counseling at schools for parents and students.

7. *Increase staff and faculty minority representation.* Ensure that psychological testing is conducted by a staffed bilingual school psychologist. Invest in bilingual high school counselors/academic advisors.

Unfortunately, these pre-collegiate initiatives only represent the first step in removing the barriers that exist for Hispanics in terms of timely degree completion. The removal of culturally specific educational attainment barriers will include the following post-secondary initiatives.

Articulate clear student and institution responsibilities.

There is sufficient evidence to suggest that a combination of student and institutional responsibility is necessary to have more timely degree completion. Clearly, the institution has the responsibility of leading students to make appropriate progress toward the completion of a degree in a timely and affordable manner. The academic support staff, a critical determinant in timely degree completion, must provide mechanisms to ensure that students fulfill the degree requirements while providing the necessary advising linkages. Additionally, academic departments need to offer required courses on both a consistent and regular basis to enable students to complete their course work in the appropriate amount of time.

Students, on the other hand, must select a major early enough to avoid taking unnecessary course work not applicable to their degree plan. It also remains the student's responsibility to make significant progress each semester as well as to maintain an appropriate grade point average. Most importantly, educators and administrators at institutions of higher learning need to identify, address, and eliminate the barriers preventing degree completion.

Develop Bilingual Brochures for High School Counselors, Parents, and Advisors

High school students need to begin preparing for their college enrollment by seeking information that is both accurate and relevant. Brochures directed at counselors, parents, and advisors might include the advantages or consequences of pursuing fast-track opportunities available at a university. By graphically demonstrating the difference in total costs when choosing a given strategy, students will be better informed about proficiency test options, choice of majors, and even their high school course selection that will minimize the need for introductory course work in college. Brochures that are designed for bilingual audiences will be especially helpful since they will overcome language barriers that may exist for many parents of Hispanic/Latino students who have not yet had the opportunity to learn English.

Include Fast-Track Information in College Catalogs

While an informational brochure describing existing fast-track options could be sent to prospective college students, a more direct approach would involve placing the necessary information in a college catalog. Students who apply to a university or college would then have direct access to this information through the catalog and this information would also be readily accessible to advisors, faculty members, and administrators. Examples of relevant information might include descriptions of the College Level Examination Program (CLEP), advanced placement, proficiency exams, portfolio credit, and sample curriculum tracks for timely degree completion.

Initiate Summer Scholarship Opportunities

Attending summer school can allow a student to complete a degree in a more timely manner. An increase in the availability of summer scholarships or other forms of financial assistance would serve as an attractive incentive to encourage increased summer course work. Preference for summer scholarships would be for students who are attempting to complete their degree in a timely manner. Students would benefit from the reduced time to degree completion, while universities and colleges would benefit from increased summer enrollments.

Exploration of a Common First-Year Experience

Students who change their majors one or more times, or who are unsure about their major field of study, reduce their chances of graduating in a timely manner. The development and application of a common first-year curriculum for all students would enable them to explore various course offerings and still graduate in a timely manner. *Students who change from one curriculum to another would not be hindered by differences in general education requirements if all interested students enrolled in courses during their first semester or year that are equally applicable to any program or major.*

Encourage Earlier Identification of Major Choice

Hispanic/Latino students who anticipate graduating in four years have often selected a major early in their collegiate experience and are already aware of which courses are required. If universities or colleges want to encourage more Hispanic/Latino students to finish in a timely manner, they need to develop techniques which encourage students to identify their majors such as activities and seminars which provide more career emphasis. Pre-college sessions or career counseling meetings for undecided majors are two options which could better assist Hispanic/Latino students in selecting a major, thus, giving them an opportunity to graduate in a more timely fashion.

Develop Fast-Track Curriculum Options

One method of assisting advisors and students when considering timely degree completion is to develop sample curriculum tracks. These sample tracks could be developed for all majors and could be used as a basis for decision making and course scheduling. These curriculum tracks also could be promoted by individual departments to give faculty and department chairs a better idea about which courses need to be offered to effectively address student needs. If clearly defined, these tracks could be advertised and delivered on a guaranteed basis.

Advertise Existing Fast-Track Options

Since a significant number of Hispanic/Latino students lack awareness of existing fast-track options such as CLEP and AP, institutions should attempt to advertise these options more broadly. In addition to including this information in descriptive brochures, this material must be placed in college catalogs and other informational materials that are distributed to Hispanic/Latino students. Advisors need to encourage new Hispanic/Latino students to explore these fast-track options as soon as possible.

Reward Competency and Life Experience

While a number of Hispanic/Latino students have skills and experiences they have mastered from one or more jobs, these levels of competency do not always translate into college credit. Universities and colleges need to recognize the importance of rewarding competencies that are obtained independently of the institutional structure. Many Hispanic/Latino students who already have specific life experiences could reduce their time at task if they obtained credit for those experiences. An effective evaluation process for rewarding competency would enable a greater number of Hispanic/Latino students to finish their degree within four years.

Train Advisors

Since advisors are responsible for guiding Hispanic/Latino students through their course work, they need to be properly trained before fulfilling this role. Not only do advisors need to be informed about various curriculum changes, but they must be made aware of existing fast-track options and sample curriculum tracks. Only then can they present this information to Hispanic/Latino students and encourage them to pursue options which allow the students to graduate in the most efficient and timely manner possible.

Build Schedules Around Student Needs

Although course schedules are often arranged to meet the needs of the instructor, universities and colleges need to recognize the importance of fulfilling the needs of non-traditional students. Required classes need to be made available when they are convenient for students to take them, not simply when they are convenient for faculty to teach them. Hispanic/Latino students often have to balance a full academic schedule with work in an effort to adequately support their families and need to be able to take courses that fit into their schedules. Courses should be offered on a consistent basis from one year to the next to allow students to make adequate preparation for their choice of course work.

Revisit General Education to Update or Modify Educational Requirements

As general education courses have repeatedly been identified as a barrier to timely degree completion, some universities and colleges might consider reevaluating their general education programs. In certain cases, it may be necessary to make extensive changes to give interested Hispanic/Latino students the opportunity to graduate in a

timely manner. Other institutions may only need to make minor changes before encouraging a greater number of students to complete their degrees in an efficient manner.

1. *Implementation of multicultural training for all the recruitment, admissions, and academic support personnel.* Use bilingual direct mailings to parents of entering freshmen. Sponsor an open house for Hispanic parents with a bilingual staff. Increase staff and faculty minority representation.

2. *Implement non-traditional recruitment methods appropriate to the needs of selected Hispanic audiences.* Develop bilingual or Spanish promotional materials. Recruit bilingual students to educational counseling and school psychology graduate programs.

3. *Create an aggressive support mechanism within the institution to support the overall development of every student.* Schedule flexible, extended hours for support services. Expand academic support initiatives. Develop peer mentor programs.

4. *Develop cooperative partnerships with identified Hispanic/Latino groups.* Host Hispanic high school senior banquets for students and parents. Credential language competencies. Promote cross-cultural centers.

Conclusion

In their book entitled Minorities in Higher Education published by The American Council on Education (1994) reports that "Hispanic access to higher education is but one of the indicators on which to measure the progress of this growing segment of the U.S. population." Although educational "inputs" are important, "outputs" (graduates) are even more critical. Not as much is known about the persistence-to-graduation rates of Hispanic/Latino students as is known of their enrollment patterns. Available data sources indicate that, on the whole, institutions of higher education are not coming close to achieving the desired results in retaining and graduating Hispanic/Latino students (Chronicle of Higher Education, September 1996). Implementation of these recommendation will pave the way for a more inclusive and productive environment in education.

References

ACE Report through 1995 Shows Slowdowns in Minority Gains. (1997, June 27). *Hispanic Outlook in Higher Education*, 10.

Carter, D. J. and Wilson, R. (Eds.). (1996, June). *Minorities in Higher Education 1995-96, Fourteenth Annual Status Report,* Washington, D.C.: American Council on Higher Education.

Carter, D. J. and Wilson, R. (Eds.). (1995, March). *Minorities in Higher Education 1994, Thirteenth Annual Status Report,* Washington, D.C.: American Council on Higher Education.

Chronicle of Higher Education 1997-98, Almanac Issue. (1997, August 29). XLIV. (1).

Crump, Jeff. (1997). *The Changing Rural Landscape of Illinois: Hispanic Immigrants in Rural Illinois* Volume 8, Issue 6). Macomb, Ill.: Illinois Institute for Rural Affairs.

Habley, Wesley R. (1995). First-Year Students: The Year 2000, Chapter 1. *First-Year Academic Advising: Patterns in the Present, Pathways to the Future Monograph Series (18),* Upcraft, M. L. and Kramer, G. L. (Eds.). University of South Carolina.

National Resource Center for The Freshman Year Experience and Students in Transition, NACADA.

Hodgkinson, Harold, and Hamilton, Janice. (1992). *Hispanic Americans: A Look Back, A Look Ahead. Hispanic Americanos: Una Mirada Hacia Atras, Una Mirada Hacia Adelante.* Washington, D.C.: Institute for Educational Leadership, Inc.

Resta, Paul. (1994). Minorities and the New Information Technologies: Barriers and Opportunities, Chapter 4. *Minorities in Higher Education.* Justiz, Manuel, et al. American Council on Higher Education. Phoenix, Ariz.: The Oryx Press.

Public Institution's Shared Enrolment and Graduation Information System. (1997). Illinois Board of Higher Education.

Retention, Graduation and Time-to-Degree of Baccalaureate Students in Public Universities. (1996, July). Illinois Board of Higher Education.

Rodriguez, Roberto. (1996, October 3). President's Hispanic Education Commission Releases Report. *Black Issues in Higher Education* 6.

Shartrand, Angela. (1996). *Supporting Latino Families: Lessons from Exemplary Programs, 1.* 3-8. Harvard Family Research Project.

Student Preparation for College. (1996, May). Illinois Board of Higher Education.

The Educational Progress of Hispanic Students: Pluses and Minuses. A Summary of Achievement by Hispanic Students in College Board Sponsored Programs. (1996). The College Board.

U.S. Bureau of the Census. (1996, December). *Census Brief, Warmer, older, more Diverse: State by State Population Changes to 2025.* Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census. (1997, January). *Census and You, 32 (1).* Washington, D.C: U.S. Government Printing Office.

U.S. Bureau of the Census. (1997, May). *Census and You, 32 5)* Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census. (1996, October). *Census and You, 31, (10).* Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census, (1993). *Hispanic Americans Today, Current Population Reports, P23-183.* Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census. (1997, January). How We're Changing, Demographic State of the Nation: 1997. Population Reports, Series P20-489. Washington, D.C.: U.S. Government Printing Office.

U.S. Bureau of the Census. (1997, April). *School Enrollment — Social and Economic Characteristics of Students: October 1995 (Update)* Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education. (1995). *Digest of Education Statistics*. Percent of High School Graduates Earning Credits Recommended by National Commission of Excellence for College-Bound Students. Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education. (1996). National Center for Education Statistics *Enrollment in Higher Education: Fall 1986 Through Fall 1994.* (NCES 96-851). Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education. (1996). National Center for Education Statistics. *National Education Longitudinal Study, 1988-1994 (NELS 88)* (NCES 95-273). Washington, D.C.: U.S. Government Printing Office.

U.S. Department of Education. (1995). National Center for Education Statistics. *The Condition of Education 1995,* (NCES 95-273). Washington, D.C.: U.S. Government Printing Office.

U.S. General Accounting Office. (1996). *Higher Education - Tuition Increasing Faster than Household Income and Public Colleges' Cost.* Washington, D.C.: U.S. Government Printing Office.

Witthuhn, B. O., and Carson, J. L. (Eds.) (1996). *Timely Degree Completion: Myth or Reality?*